UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/576,275	03/23/2007	Kalle Larsson	ELO-00030	9059	
	7590 04/13/201 <b>MANN, MILLER &amp;</b> L	EXAMINER			
PO BOX 70098			BASTIANELLI, JOHN		
ROCHESTER HILLS, MI 48307			ART UNIT	PAPER NUMBER	
			3753		
			MAIL DATE	DELIVERY MODE	
			04/13/2010	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Applicati	on No.	Applicant(s)			
		10/576,2	75	LARSSON ET AL.			
		Examine	r	Art Unit			
		John Bas		3753			
Period fo	The MAILING DATE of this communication r Reply	appears on th	e cover sheet with the c	orrespondence ad	ldress		
WHIC - Exter after - If NO - Failui Any r	ORTENED STATUTORY PERIOD FOR RICHEVER IS LONGER, FROM THE MAILIN usions of time may be available under the provisions of 37 CF SIX (6) MONTHS from the mailing date of this communication period for reply is specified above, the maximum statutory preto reply within the set or extended period for reply will, by seeply received by the Office later than three months after the part of the provided patent term adjustment. See 37 CFR 1.704(b).	G DATE OF TI FR 1.136(a). In no ev n. eriod will apply and v statute, cause the ap	HIS COMMUNICATION ent, however, may a reply be tin till expire SIX (6) MONTHS from blication to become ABANDONE	N. nely filed the mailing date of this c D (35 U.S.C. § 133).			
Status							
1)⊠	Responsive to communication(s) filed on a	17 December 1	000				
-	Responsive to communication(s) filed on <u>17 December 2009</u> .  This action is <b>FINAL</b> .  2b) This action is non-final.						
′—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
3)Ш	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims						
<ul> <li>4) ☐ Claim(s) 12-34 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 12-34 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>							
Applicati	on Papers						
10)🛛	The specification is objected to by the Example The drawing(s) filed on <u>28 September 2005</u> Applicant may not request that any objection to Replacement drawing sheet(s) including the control of the oath or declaration is objected to by the	9 is/are: a)⊠ a the drawing(s) prrection is requi	pe held in abeyance. See red if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 Cl	FR 1.121(d).		
Priority u	ınder 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
2) Notic	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948 nation Disclosure Statement(s) (PTO/SB/08)	3)	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P	ate			
Paper No(s)/Mail Date 6) Other:							

Application/Control Number: 10/576,275 Page 2

Art Unit: 3753

#### **DETAILED ACTION**

## **Drawings**

The drawings were received on September 28, 2009. These drawings are acceptable.

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 13-15, 19-20, 24-26, and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakaguchi et al. US 4,782,860 in view of Bosley US 4,690,371. Sakaguchi discloses a valve device for controlling fluid flow, having a hollow body bounding a flow path for the fluid through said valve device, a valve obturating member/in the form of a unit 3 and 4 in said flow path and movable between a more obturating position and a less obturating position for permitting lesser and greater flows of said fluid along said path, which flows urge said member in the sense from said more obturating position to said less obturating position (Figs. 1 or 3), said valve obturating member including magnetic portions 4, an electrically energizable inductor 5 which, while remaining stationary relative to said body and while electrically energized, acts upon said valve obturating member with a force to urge said valve obturating member in the sense from said less obturating position to said more obturating position, an

Art Unit: 3753

electrical supply arrangement connected to said inductor, and a control arrangement 21 which is connected to said electrical supply arrangement and which serves to adjust the magnitude of the current supplied to said inductor by said supply arrangement and thereby to adjust said force. There are no moving parts other than said valve obturating member. Sakaguchi lacks the inductor encircling the magnetic portions. Bosley discloses the inductor encircling the magnetic portions. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the inductor of Sakaguchi encircle the magnetic portions as disclosed by Bosley in order to make the valve shorter to make it smaller and/or protecting the magnetic portions as they would be inside the inductor. The method is seen as practiced by the apparatus. A valve seat 2 on said flow-path, said more obturating position being an end position in which said valve obturating member is fully closed on the valve seat, so as to be applied to the seat in a substantially fluid-tight manner, and said valve seat facing downstream of said flow path, whereby said less obturating position is further downstream in said flow path than is said more obturating position.

Page 3

3. Claims 13-15, 19-20, 24-26, and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. US 3,758,071 in view of Sakaguchi et al. US 4,782,860 in view of Bosley US 4,690,371.

Anderson discloses a valve device for controlling fluid flow, having a hollow body bounding a flow path for the fluid through said valve device, a valve obturating member/in the form of a unit 4 in said flow path and movable between a more obturating position and a less obturating position for permitting lesser and greater flows of said

Art Unit: 3753

fluid along said path, which flows urge said member in the sense from said more obturating position to said less obturating position (Fig. 1), said valve obturating member including magnetic portions, an electrically energizable inductor 23 which, while remaining stationary relative to said body and while electrically energized, acts upon said valve obturating member with a force to urge said valve obturating member in the sense from said less obturating position to said more obturating position, and an electrical supply arrangement connected to said inductor. Anderson lacks a control arrangement which is connected to said electrical supply arrangement and which serves to adjust the magnitude of the current supplied to said inductor by said supply arrangement and thereby to adjust said force. Sakaguchi discloses a control arrangement which is connected to said electrical supply arrangement and which serves to adjust the magnitude of the current supplied to said inductor by said supply arrangement and thereby to adjust said force. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the control arrangement to adjust the magnitude of the current supplied to said inductor by said supply arrangement and thereby to adjust said force of Anderson in order to provide the minimum needed force to close the valve. Anderson lacks the inductor encircling the magnetic portions. Bosley discloses the inductor encircling the magnetic portions. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the inductor of Anderson encircle the magnetic portions as disclosed by Bosley in order to make the valve shorter to make it smaller and/or protecting the magnetic portions as they would be inside the inductor. The method is seen as

Art Unit: 3753

practiced by the apparatus. Anderson discloses no moving parts other than said valve obturating member. A valve seat 17 on said flow-path, said more obturating position being an end position in which said valve obturating member is fully closed on the valve seat, so as to be applied to the seat in a substantially fluid- tight manner, and said valve seat facing downstream of said flow path, whereby said less obturating position is further downstream in said flow path than is said more obturating position.

Page 5

4. Claims 13-16, 19-21, 24-27, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakaguchi et al. US 4,782,860 in view of Jensen et al. US 5,351,934.

Sakaguchi lacks the inductor encircling the magnetic portions. Jensen discloses the inductor encircling the magnetic portions. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the inductor of Sakaguchi encircle the magnetic portions as disclosed by Jensen in order to make the valve shorter to make it smaller and/or protecting the magnetic portions as they would be inside the inductor. Sakaguchi lacks a plurality of energizable inductors. Jensen discloses a plurality of energizable inductors 26 and 28. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a plurality of energizable inductors as disclosed by Jensen in place of the single inductor of Sakaguchi as a matter of simple substitution and/or to provide a stronger magnetic field.

5. Claims 13-16, 19-21, 24-27, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. US 3,758,071 in view of Sakaguchi et al. US 4,782,860 in view of Jensen et al. US 5,351,934.

Art Unit: 3753

Anderson lacks the inductor encircling the magnetic portions. Jensen discloses the inductor encircling the magnetic portions. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the inductor of Anderson encircle the magnetic portions as disclosed by Jensen in order to make the valve shorter to make it smaller and/or protecting the magnetic portions as they would be inside the inductor. Anderson lacks a plurality of energizable inductors to constitute a linear motor. Jensen discloses a plurality of energizable inductors 26 and 28 to constitute a linear motor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a plurality of energizable inductors as disclosed by Jensen in place of the single inductor of Anderson as a matter of simple substitution and/or to provide a stronger magnetic field.

Page 6

6. Claims 17, 22, 28, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakaguchi et al. US 4,782,860 in view of Jensen et al. US 5,351,934 in view of Sato US 6,230,606.

Sakaguchi lacks a linear encoder to determine the position of the valve. Sato discloses a linear encoder 19 to determine the position of the valve. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a linear encoder as disclosed by Sato in the valve of Sakaguchi in order to fix the position of the valve by varying the current supplied.

7. Claims 17, 22, 28, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. US 3,758,071 in view of Sakaguchi et al. US 4,782,860 in view of Jensen et al. US 5,351,934 in view of Sato US 6,230,606.

Art Unit: 3753

Anderson lacks a linear encoder to determine the position of the valve. Sato discloses a linear encoder 19 to determine the position of the valve. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a linear encoder as disclosed by Sato in the valve of Anderson in order to fix the position of the valve by varying the current supplied.

Page 7

8. Claims 18, 23, 29 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakaguchi et al. US 4,782,860 in view of Bosley US 4,690,371 in view of Reichert et al. US 3,604,480.

Sakaguchi lacks a mention of using the valve in a filler of a machine to fill containers.

Reichert discloses containers at the outlet of the valve. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use containers as disclosed by Reichert in the system of Sakaguchi in order be able to store the fluid valved.

9. Claims 18, 23, 29 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. US 3,758,071 in view of Sakaguchi et al. US 4,782,860 in view of Bosley US 4,690,371 in view of Reichert et al. US 3,604,480. Anderson lacks a mention of using the valve in a filler of a machine to fill containers. Reichert discloses using the valve in a filler of a machine to fill containers. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use containers as disclosed by Reichert in the system of Anderson in order be able to store the fluid valved.

Art Unit: 3753

10. Claims 18, 23, 29 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakaguchi et al. US 4,782,860 in view of Jensen et al. US 5,351,934 in view of Reichert et al. US 3,604,480.

Page 8

Sakaguchi lacks a mention of using the valve in a filler of a machine to fill containers. Reichert discloses containers at the outlet of the valve. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use containers as disclosed by Reichert in the system of Sakaguchi in order be able to store the fluid valved.

11. Claims 18, 23, 29 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. US 3,758,071 in view of Sakaguchi et al. US 4,782,860 in view of Bosley US 4,690,371 in view of Reichert et al. US 3,604,480. Anderson lacks a mention of using the valve in a filler of a machine to fill containers. Reichert discloses containers at the outlet of the valve. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use containers as disclosed by Reichert in the system of Anderson in order be able to store the fluid valved.

# Response to Arguments

- 12. Applicant's arguments with respect to claims 13-34 have been considered but are moot in view of the new ground(s) of rejection.
- 13. The examiner would like to note that an electrically energizable inductor which encircles magnetic portions is well known in the art.

Application/Control Number: 10/576,275 Page 9

Art Unit: 3753

#### Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Bastianelli whose telephone number is (571) 272-4921. The examiner can normally be reached on M-Th (8-6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/576,275 Page 10

Art Unit: 3753

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Bastianelli Primary Examiner Art Unit 3753

/John Bastianelli/ Primary Examiner, Art Unit 3753